

Title (en)
COMPOSITE SEMIPERMEABLE MEMBRANE AND METHOD FOR MANUFACTURING SAME

Title (de)
SEMIPERMEABLE VERBUNDMEMBRAN UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
MEMBRANE COMPOSITE SEMI-PERMÉABLE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3682964 A1 20200722 (EN)

Application
EP 18857259 A 20180816

Priority
• JP 2017177513 A 20170915
• JP 2018030437 W 20180816

Abstract (en)
The purpose of the present invention is to provide a composite semipermeable membrane, which has excellent oxidant resistance (chlorine resistance) and salt rejection property, and a method for producing the same. The composite semipermeable membrane has a skin layer, which includes a polyamide-based resin obtained by polymerization of a polyfunctional amine component and a polyfunctional acid halide component and is formed on the surface of a porous support. The polyfunctional amine component includes an alicyclic diamine. The skin layer has an absorption peak intensity of at least 0.03 that is obtained by a Fourier transform infrared spectroscopy (FT-IR) transmission method and originates in the stretching vibration of C=O in the amide groups.

IPC 8 full level
B01D 71/56 (2006.01); **B01D 69/10** (2006.01); **B01D 69/12** (2006.01)

CPC (source: EP KR US)
B01D 67/0006 (2013.01 - EP KR); **B01D 67/0093** (2013.01 - EP); **B01D 69/02** (2013.01 - EP KR US); **B01D 69/06** (2013.01 - KR); **B01D 69/10** (2013.01 - KR); **B01D 69/1213** (2022.08 - KR); **B01D 69/125** (2013.01 - US); **B01D 69/1251** (2022.08 - EP US); **B01D 71/56** (2013.01 - EP KR US); **C02F 1/44** (2013.01 - KR US); **B01D 2323/12** (2013.01 - KR); **B01D 2323/40** (2013.01 - EP); **B01D 2325/20** (2013.01 - EP KR US); **B01D 2325/30** (2013.01 - EP KR US); **C02F 2103/08** (2013.01 - US); **C02F 2103/10** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3682964 A1 20200722; **EP 3682964 A4 20210616**; CN 111050891 A 20200421; JP 2019051480 A 20190404; JP 7300810 B2 20230630; KR 102551961 B1 20230705; KR 20200053549 A 20200518; US 2020261860 A1 20200820; WO 2019054119 A1 20190321

DOCDB simple family (application)
EP 18857259 A 20180816; CN 201880058948 A 20180816; JP 2017177513 A 20170915; JP 2018030437 W 20180816; KR 20207010415 A 20180816; US 201816645642 A 20180816